

# FORT DUPONT REDEVELOPMENT & PRESERVATION CORPORATION

## DELAWARE CITY BRANCH CHANNEL REKETMENT

*Department of Natural Resources and Environmental Control*

### PUBLIC HEARING



January 12, 2022

# Delaware City Branch Channel Revetment

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## AGENDA

- Project History
- Project Overview
- Public Comments
- Subaqueous Land Permit
- Project Benefits

# Delaware City Branch Channel Revetment

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## PROJECT HISTORY

# Delaware City Branch Channel Revetment

## Project History

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### Planning for the Future

- Fort DuPont Redevelopment and Preservation Corporation
  - Established by Delaware Legislature by HB 310 in July 2014 to preserve and protect the recreational amenities of Fort DuPont and to make capital Improvement to the 325 Acre Complex
- Delaware City Branch Channel
  - The Branch Channel is in the process of being transferred to the Fort DuPont Redevelopment and Preservation Corporation State of Delaware through the America's Water Infrastructure Act of 2018

# Delaware City Branch Channel Revetment

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## PROJECT OVERVIEW

# Delaware City Branch Channel Revetment Project Overview

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# Delaware City Branch Channel Revetment

## Project Overview

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# Delaware City Branch Channel Revetment

## Project Overview

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- The revetment project is located along the Delaware City Branch Channel, between the DNREC boat ramp bulkhead and the 9<sup>th</sup> Street Bridge.
- The Revetment project will rebuild the former rip-rap armored slope
- The original rip-rap armored slope has deteriorated by erosion and is no longer serviceable. This erosion is threatening the stability of the adjacent lands. In addition, the sediments entering the Branch Canal from this slope could obstruct boat traffic.



# Delaware City Branch Channel Revetment Project Overview

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# Delaware City Branch Channel Revetment

## Project Overview

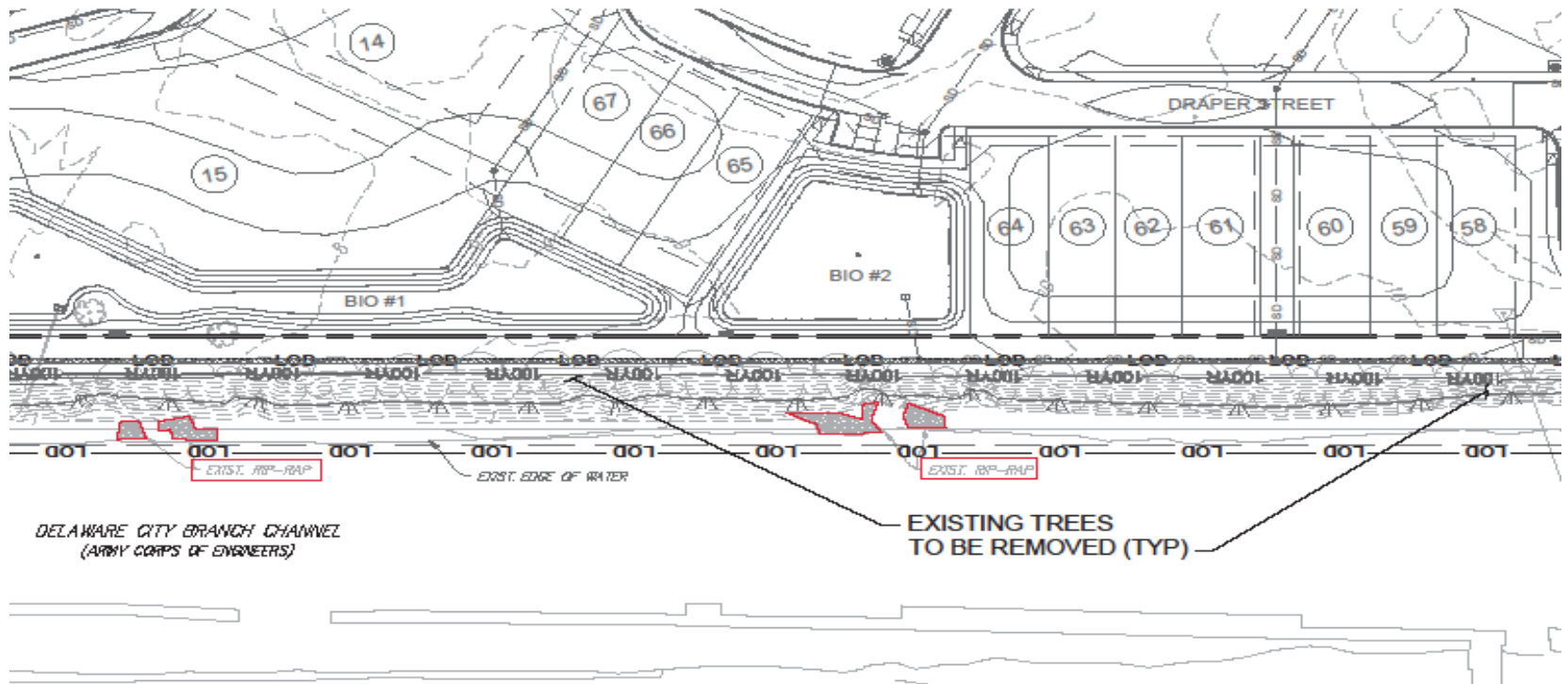
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# Delaware City Branch Channel Revetment Project Overview

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# Delaware City Branch Channel Revetment

## Project Overview

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- The revetment project will impact 1,600 linear feet of the bank.
- $5,363 \pm$  cubic yards of riprap will be place on the bank and impact  $0.82 \pm$  acres of regulated waters.
- The riprap will be placed on a geotextile fabric, with no modifications to the existing slope, and no backfill or dredging.
- The Erosion and Sediment Control plans for the revetment and adjoining lands was approved by DNREC on December 15, 2021.

# Delaware City Branch Channel Revetment

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## PUBLIC COMMENTS

# Delaware City Branch Channel Revetment

## Public Comments

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### □ **SECTION 106 REVIEW**

- Section 106 review has been initiated as part of the U.S. Army Corps of Engineers, Section 404 and 408 permit applications.
- The Delaware, Division of Historic and Cultural Affairs (HCA) has been notified.
- A Phase I Archeological Evaluation has been completed.
- The U.S. Army Corps of Engineers' staff archeologist is also reviewing the applications and coordinating with HCA to ensure no historic artifacts are impacted without being properly documented.
- The Section 106 review process is required for Federal projects and not a DNREC issue, which is why no discussion was included in this permit application



# Delaware City Branch Channel Revetment

## Public Comments

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### AESTHETICS

End of Construction



Three years post construction



Photos from similar revetment along opposing side of the Branch Channel in 2010. Existing trees on the top of bank will be removed for the construction of Promenade.

# Delaware City Branch Channel Revetment

## Public Comments

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- Lines 4 & 16, Basic Application contradicts Line 1 of Appendix I concerning “New” and “Repair/Replace”; this contradiction was corrected, and the proposed revetment is considered a “New” activity.
- The measurement listed on Line 5, Basic Application, which states 2000 linear feet of shoreline stabilization, is not consistent with Line 2 of Appendix I; which states 1,600 linear feet of shoreline stabilization. This contradiction was corrected and now 1,600 is listed in both locations.
- Line 19, Basic Application: the box that affirmatively designates the listed authorized agent was not checked: the correct box has now been checked.

# Delaware City Branch Channel Revetment

## Public Comments

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- Line 8D on Appendix I has been revised to indicate that a geotextile fabric was going to be placed behind the riprap.
- Concern was raised about the 2:1 slope listed on Appendix I, Lines 8E and 8F when compared with the actual measurements on the cross-sections provided with the application. In response “+/-” was added to these cross-sections to account for minor deviation that will likely occur when working in the field.
- A revised applications containing these revisions was submitted to DNREC on January 11, 2022 and posted.
- Other comments were received. Detailed responses to all the received comments were provided to DNREC on January 12, 2022.

# Delaware City Branch Channel Revetment

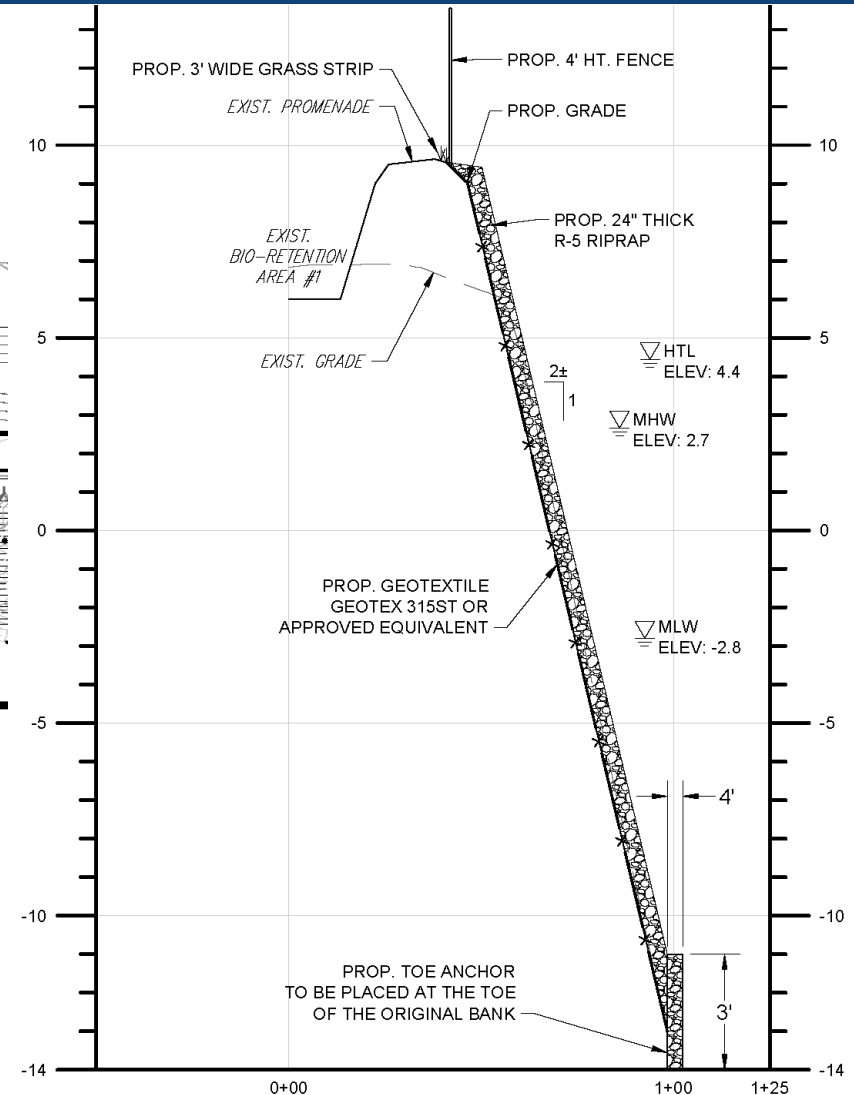
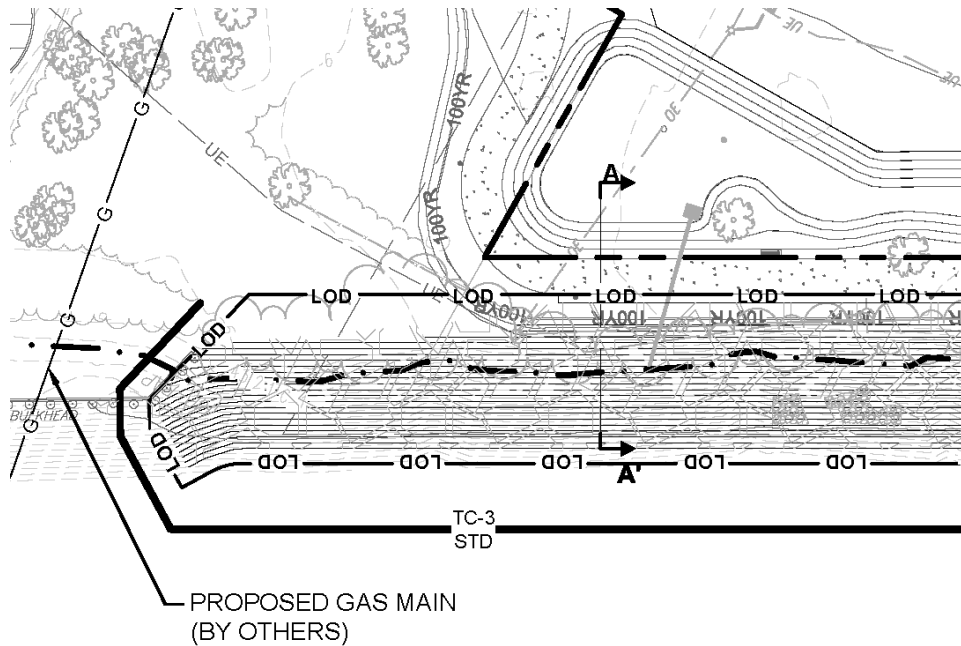
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## SUBAQUEOUS LANDS APPLICATION

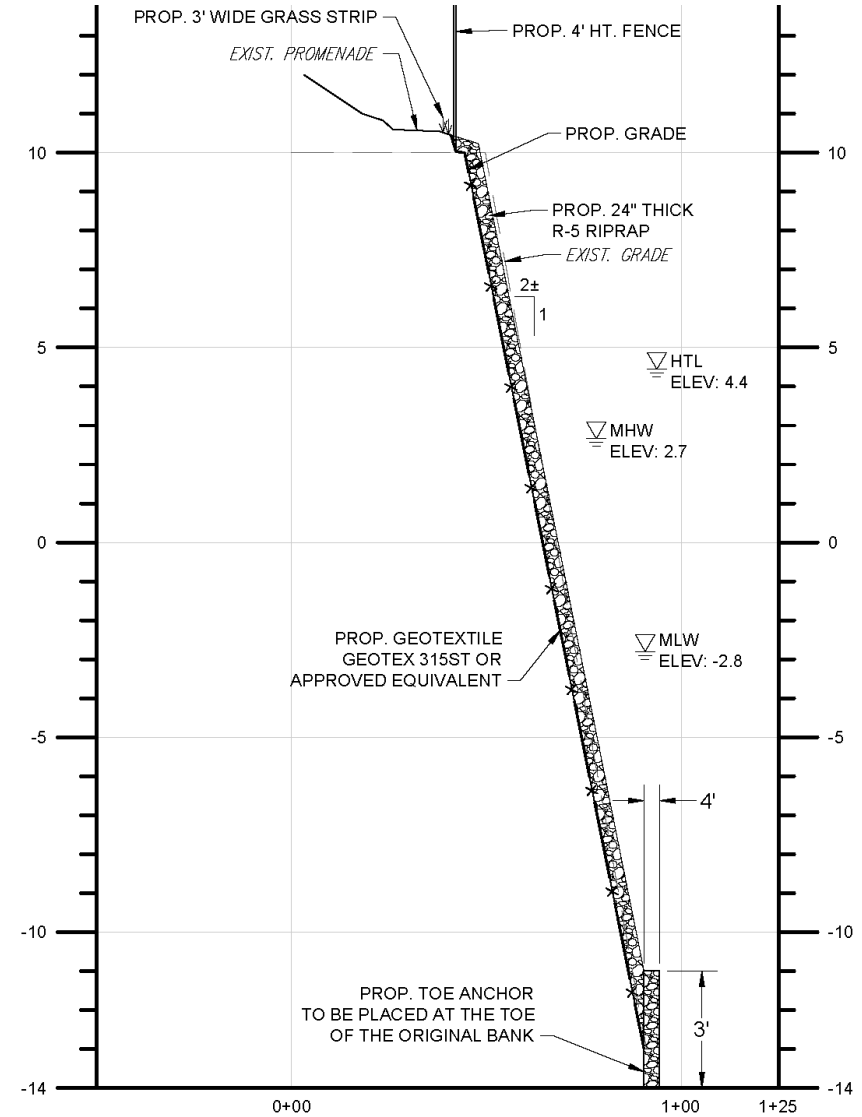
# Delaware City Branch Channel Revetment

## Subaqueous Lands Application

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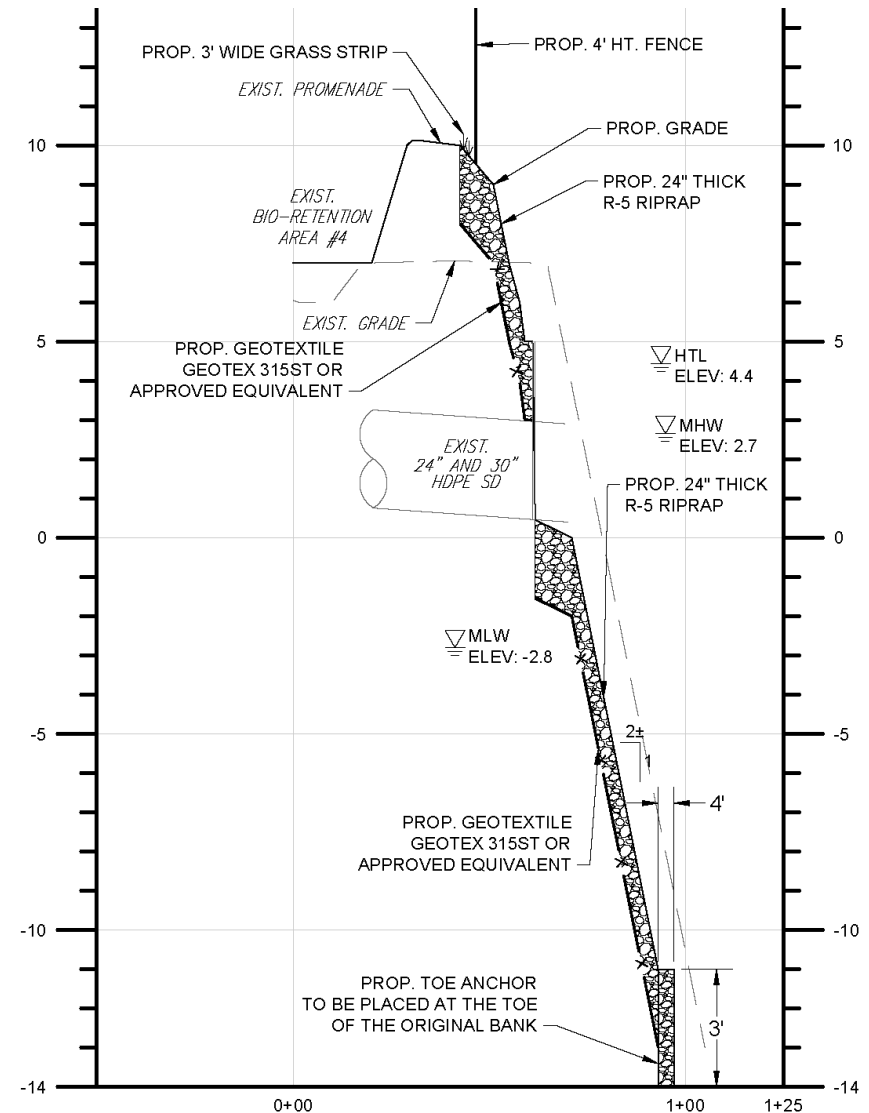
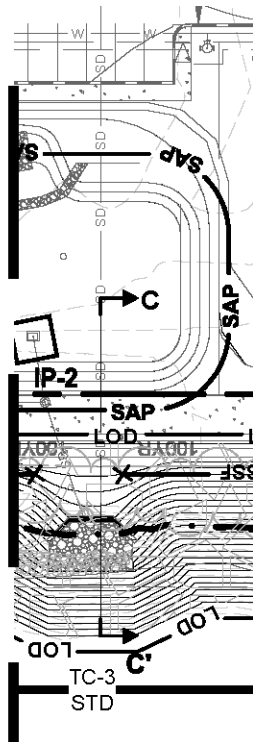




# Delaware City Branch Channel Revetment

## Subaqueous Lands Application

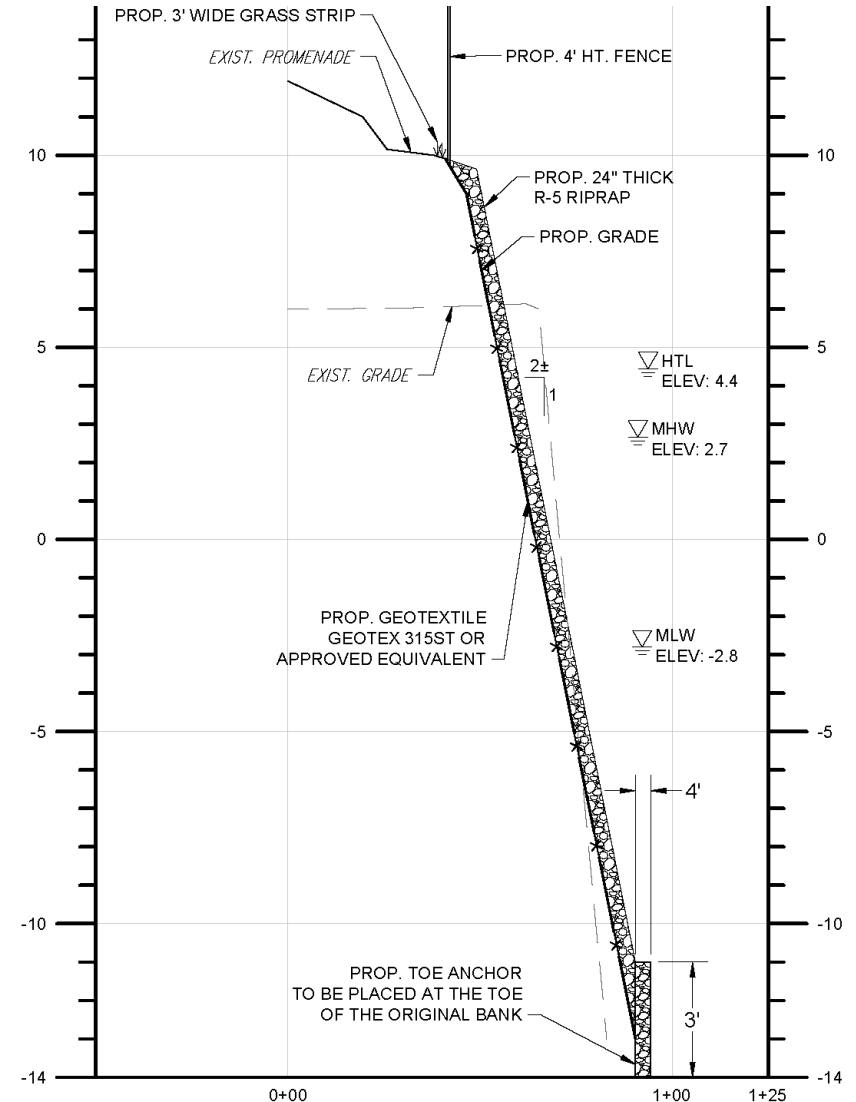
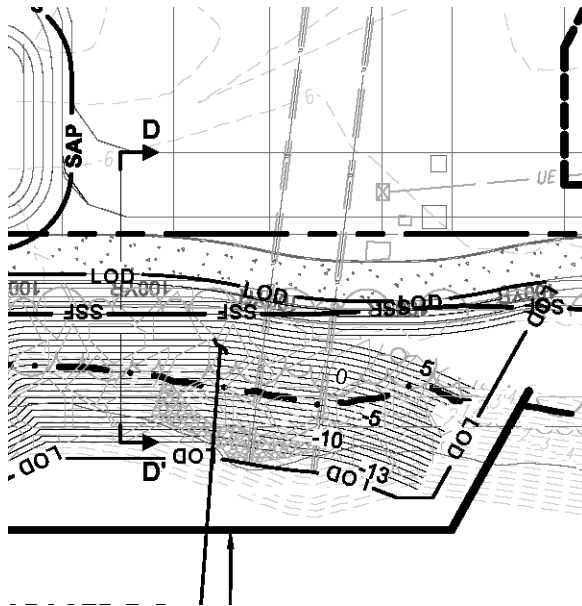
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# Delaware City Branch Channel Revetment

## Subaqueous Lands Application

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# Delaware City Branch Channel Revetment

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## PROJECT BENEFITS

# Delaware City Branch Channel Revetment

## Project Benefits

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- Maintain the Branch Channel geometry
- Reduce slope sloughing into the channel and thus maintain boat traffic
- Repair erosion pockets throughout slope
- Protect the infrastructure along the top of the slope
  - Includes public access Promenade, houses and site infrastructure